



Successful Volunteer Monitoring

# **San Diego Stream Team**

Monitoring the health of  
San Diego County streams and rivers

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# Overview

- Why citizen monitoring?
- What is Bioassessment?
- San Diego Stream Team monitoring/sampling
- History of SDST
- Organizational first steps
- First time funding
- Organization challenges
- Home<sub>2</sub>Ocean Citizen Monitoring





# Why citizen monitoring?

- Preserve and restore native streams and riparian areas
- Increased pressure on aquatic ecosystems
- Limited funds necessary to protect them
- Too few biologists to monitor
- Water quality agencies and concerned citizens must join forces to protect
- Educate citizens about environmental processes, and how to measure and improve them



# What is Bioassessment?

- Collect biological community information
- Measure of the physical and habitat quality
- Determine the integrity of a water body





# Biological Integrity

US EPA Definition:

The ability of an aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition diversity and functional organization comparable to that of the natural habitats of a region.



# Benthic Macroinvertebrates

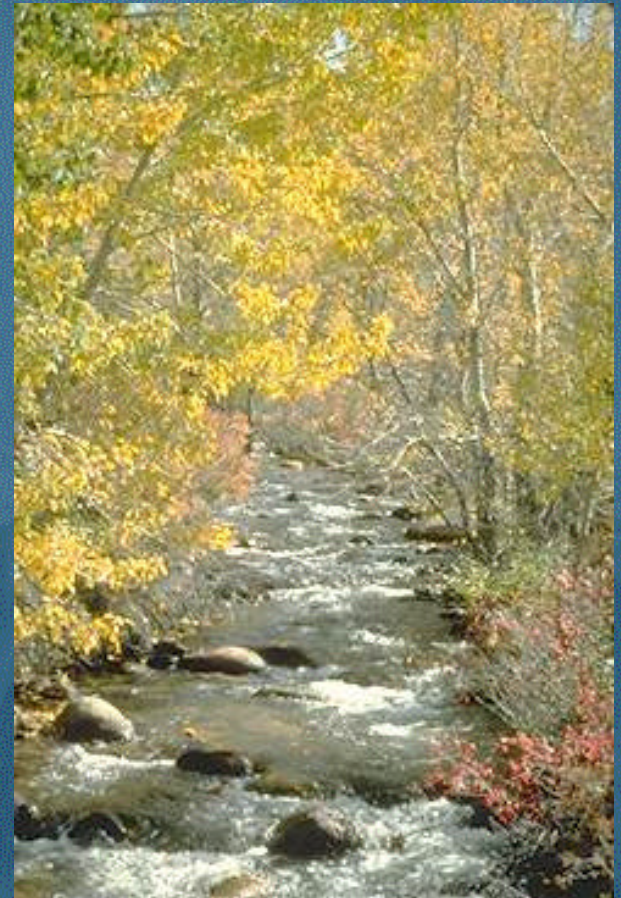
- Aquatic invertebrates at least 0.5 mm in length
- Primarily live on the bottom substrate of streams and rivers





# San Diego Stream Team Monitoring/Sampling

- Chemical monitoring
- Physical habitat assessment
- Benthic macroinvertebrate sampling





# History of the San Diego Stream Team

- Local biologist collecting reference specimens from 1987 till 1993
- Became involved with Sweetwater Summit, a SWRCB water monitoring education outreach program
- Monthly meetings began
- First workshop/training o December 28, 1998
- Three day training by Jim Harrington in early 1999
- Collected first samples in spring 1999



# Organizational First Steps

- Appointed a coordinator
- Sought out partnerships
- Formed a financial partnership with local organization
- Obtained funding from local foundation
- Grant paid for part time staff (20 hrs/week) and interns



# Successes

- Obtained non-profit status
- Established steering committee and volunteer positions
- Developed Quality Assurance Project Plan
- Coordinated regular trainings for volunteers
- Ongoing field sampling spring and fall since spring of 1999
- Over 225 volunteers trained/interested



# Challenges

- All volunteer agency – most active volunteers work full-time jobs
- Need funding for full time coordinator
- Back log of samples that need to be processed in lab
- Need more volunteers for lab work
- Need more technical advisors to oversee lab work
- Volunteer management necessary but very time consuming



# Upcoming Tasks for San Diego Stream Team

- Develop membership program to cover basic operating costs including equipment/insurance
- Continue to seek funding for paid staff
- Add an additional lab site for processing of samples
- Develop a certification program for volunteers and technical advisors
- Seek out sponsorships from consulting firms and other agencies



# Santa Margarita Home<sub>2</sub>Ocean Citizen Water Quality Monitoring Program

- Managed by Mission Resource Conservation District
- Funded through State Water Resources Control Board 319(h) grant
- 3 year grant period for \$54,000 with \$56,000 in-kind and cash match



# Santa Margarita Home<sub>2</sub>Ocean Citizen Water Quality Monitoring Program

- Trained 35 volunteers in January 2003
- Currently have seven consistent volunteers
- Conduct chemical and bioassessment at three sites in Santa Margarita watershed
- Water samples collected and analyzed every two weeks
- Bioassessment twice per year



# Santa Margarita Home<sub>2</sub>Ocean Citizen Water Quality Monitoring Program

## Recommendations for new programs

- Starting a program requires significant administrative work
- Contact other citizen monitoring programs or SWRCB Clean Water Team for advice and document templates
- If possible, observe other monitoring programs in the field



# Santa Margarita Home<sub>2</sub>Ocean Citizen Water Quality Monitoring Program

Contact Mission RCD

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